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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/910,970 | 07/20/2001 | David H. Hanes | 10012397-1 | 2563 |

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HEWLETT-PACKARD COMPANY
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EXAMINER

VENT, JAMIE J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2613

DATE MAILED: 08/11/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/910,970

Applicant(s)

HANES, DAVID H.

Examiner

Jamie Vent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

The title of the invention is objected to. A new title is required that is clearly indicative of the invention to which the claims are directed in a more concise form.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 –4, 6-10, 12-22 are rejected under 35U.S.C.102(b) as being anticipated by Nafeh (US 5,343,251).

1. In regard to Claim 1, Nafeh discloses a method for identifying signal patterns and associated apparatus comprising:

- output from recorded video data (Column 2, Lines 55-58, “received through a variety of sources... storage and recording devices”);
- analyzing the output (Column 5 Lines 35-36, analyzing the feature vectors from the signal pattern and classifying and comparing vector indicator numbers against a threshold of zero);

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- determining material desired or undesired (Column 5 Lines 35-38, range of +1 representing desired material and -1 representing undesired material);
- identifying the video segments (Column 6 Lines 30-39, classification of segments, through the range of +1 and -1, are identified as all desired material, all undesired material, or a combination of both materials. The decision is converted and retained for future decisions regarding signal patterns.).

2. In regard to Claim 2, Nafeh further discloses an analog to digital converter for digitizing the video segments (Column 5, Lines 40-41).

3. In regard to Claim 3, Nafeh discloses that the newly digitized segments are "compressed" with a 'sigmoid function' (Column 6, Lines 60-61).

4. In regard to Claim 4, Nafeh fails to recite "formatting" video but in view of the steps of recording, compression, and digitizing of video, the limitation of formatting of video is met by the recording format, compression format, and/or analog or digital video signal format.

5. In regard to Claims 6, 12, and 22, Nafeh discloses an input into the system through a video recorder, such as a VCR (Figure 6).

6. In regard to Claims 7 and 13, Nafeh discloses analyzing video generating parameters such as amplitude, variance, and standard deviation; Nafeh meets the limitations of a histogram (Column 3, Lines 35-38).

7. In regard to Claims 8, 14, and 20 Nafeh discloses the use of picture vectors and indicator numbers to:

- analyzing vectors (Column 4, Lines 45-48 and Column 5, Lines 6-7, identify vectors and change in vectors through detectors and amplifiers that show changes and classify by indicator number in the range of +1 and -1);
- determining from vectors if material is all undesired (Column 5, Line 35-38 and Column 6 Lines 25-26, classification of video stream and vectors, by the numeric value of indicator numbers, into desired and undesired segments through the use of the range of +1 and -1).

8. In regards to Claim 9, Nafeh discloses an apparatus and application for identifying signal patterns comprising:

- receiving input from recorded video data (Column 2, Lines 55-58, "received through a variety of sources... storage and recording devices");
- analyzing the output (Column 8 Lines 33-37, analyzing the segments into two groups that show the various frames of the segment and index

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representation of at least one signal segment/parameter of at least one of the groups of signals.);

- determining material desired or undesired (Column 8 Line 43, classification of signal segments into signal groups thus determining from grouping if material was desired, undesired, or both);
- identifying the video segments (Column 8 Lines 46-48, identification of signals to the segments and directing and transforming the groups of signals to respective end use locations);

9. In regard to Claim 10, Nafeh discloses a media storage system operable to store at least a portion of the plurality of video frames (See Figure 1A, "VCR1, VCR2, and VCRN").

10. In regards to Claim 15, Nafeh discloses an apparatus and application for identifying signal patterns comprising:

- receiving input from recorded video data (Column 2, Lines 55-58, "received through a variety of sources... storage and recording devices");
- residing of operable logic on module (Column 7, Lines 4-10, coordination of all tasks completed by the central logic with the aid of the stack, program data memory, program control, memory control logic and shifters which all reside on the Digital Signal Processor module as seen in Figure 1E);

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- analyzing the output (Column 8 Lines 33-37, analyzing the segments into two groups that show the various frames of the segment and index representation of at least one signal segment/parameter of at least one of the groups of signals.);
- determining material desired or undesired (Column 8 Line 43, classification of signal segments into signal groups thus determining from grouping if material was desired, undesired, or both);
- identifying the video segments (Column 8 Lines 46-48, identification of signals to the segments and directing and transforming the groups of signals to respective end use locations);

11. In regard to Claims 16 and 17, Nafeh discloses that the central logic used to aid the program data memory of all activities, such as inputs, neural computations, outputs, etc., is located on the module of the Digital Signal Processor element (Figure 1E).

These routine activities control the functioning of the Digital Signal Processor hardware that directs the operation of controlling the multiplexed analog to digital converter to gain digital equivalents of the various picture vectors (Column 6 Lines 46-50). Once the values are produced each value is then multiplied by appropriate weights in order to obtain proper grouping. The multiplication application is accomplished by using a multiplier that is stored in the parameter memory, EEPROM or ROM (Column 7 lines 1-3). As defined by The American Heritage College Dictionary, firmware is "software that

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is stored in the ROM." The multiplication application listed above that is stored in the EEPROM or ROM would by definition be considered firmware.

12. In regard to Claim 19, Nafeh discloses a system that once desired segments are gathered a possible output is sent to a record able median of the VCRN (Figure 1A).

13. In regard to Claim 21, Nafeh discloses that the system has various user-selected modes that allow the user to have controls of the various video segments (Column 7, Line 23).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nafeh (US 5,343,251).

In regard to Claims 5 and 11, Nafeh discloses that video segments and values are stored in the EPROM or ROM memory (Column 7, Line 3).

Nafeh fails to disclose an additional optical storage media incorporated into the storage device.

The examiner takes official notice that optical storage media (such as CD, DVD, etc)

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It would be obvious to one skilled in the art at the time of the invention for Nafeh to utilize or substitute optical storage media and system for additional or alternate storage device as is well known and widely used.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. As disclosed by Boles et al (US 5,019,899) an electronic data and encoding with a recognition system is of significant interest. Also, noted is Dimitrova et al (US 6,100,941) system and method for locating a commercial within a video stream.

Contact Fax Information

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

Or faxed to:

703.208.6306 (for formal communication intended for entry)
703.308.5359 (for informal or draft communications, please label "PROPOSED"
or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamie J. Vent whose telephone number is (703) 305-0378.

If any attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Christopher Kelley, can be reached at (703) 305-4856.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

JV
Jamie Vent
08/05/2003


VINCENT BOCCIO
PRIMARY EXAMINER